



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,846	01/13/2005	Sung Yoon Kim	260977US6PCT	7194
22850	7590	08/06/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
SCHWARTZ, DARREN B				
ART UNIT		PAPER NUMBER		
2435				
NOTIFICATION DATE		DELIVERY MODE		
08/06/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

### Office Action Summary

**Application No.**

10/519,846

**Applicant(s)**

KIM ET AL.

**Examiner**

DARREN SCHWARTZ

**Art Unit**

2435

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-20 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-20 and 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date 03-19-09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 2, 4-20 and 23-25 have been considered but are moot in view of the new ground(s) of rejection. However, the Examiner will address issues raised by applicant.
2. Applicant argues on page 14 of REMARKS, Oho in view of Alain fail to teach the amended limitations of claim 13. The Examiner disagrees and addresses claim 13 and its dependants *infra*.

### ***Claim Objections***

Claims 1 and 19 are objected to because of the following informalities:

Claim 1 recites, *at least*, "means for receiving grouped device identification information and key information, for transmitting the grouped device identification information and the license identification information, and for receiving a license corresponding to the license identification information and identifying the grouped device identification information, the grouped device identification information grouping and identifying a plurality of information devices" (emphasis added).

The claim should probably read, "means for receiving grouped device identification information and key information, means for transmitting the grouped device identification information and the license identification information, and means for receiving a license corresponding to the license identification information and identifying the grouped device identification information, the grouped device

identification information grouping and identifying a plurality of information devices;" (emphasis added).

Similar instants can be found in claim 19.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 5, 9-12, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alain et al (U.S. Pat Pub 2003/0110131 A1), hereinafter referred to as Alain, in view of Tanaka et al (U.S. Pat Pub 2002/0114466 A1), hereinafter referred to as Tanaka.

Re claim 1: Alain teaches an information device, comprising:

means for receiving grouped device identification information [Fig 2c.1, elements: "Group B," "Group C;" Fig 2c.2, elements: "group ID," "user/group ID;" ¶103] and key information [Fig 2c.1, elements: "File Key B," "File Key C;" Fig 2c.2, element "file key;" ¶103] (¶75-¶76)), for transmitting the grouped device identification information (Fig 2c.1, elements: "Group B," "Group C;" Fig 2c.2, elements: "group ID," "user/group ID;" ¶103; ¶75-¶76), and identifying the groups device identification information (Fig 2c.1, elements: "Group B," "Group C;" Fig 2c.2, elements: "group ID," "user/group ID;" ¶17,

lines 11-14), the group device identification information grouping and identifying a plurality of information devices (Fig 2D; ¶108);

means for storing user data including (a) the groups device identification information [Fig 2c.1, elements: "Group B," "Group C;" Fig 2c.2, elements: "group ID," "user/group ID;" ¶103] and (b) the key information [Fig 2c.1, elements: "File Key B," "File Key C;" Fig 2c.2, element "file key;" ¶103] (¶73), which is commonly provided to the plurality of information devices (¶73), wherein the means for storing the user data stores the grouped device identification information and the key information in an association together (Fig 2c.1; ¶73; ¶102);

means for reading out the key information from the user data based on the grouped device identification information (¶62-¶63; ¶102-¶103); means for reading out of the grouped device identification information from the license (¶17; Fig 2c.1, in particular elt 238);

However, Tanaka teaches:

means for storing an encrypted content that identifies a license identification information (¶7; ¶16; ¶83, right column);

means for transmitting the license identification information (¶8); means for receiving a license corresponding to the license identification information (¶8);

means for storing the license (¶8);

means for reading out the license identification information from the encrypted content (¶105), the license corresponding to the license identification information (¶7;

¶16; ¶83, right column), and for decrypting the encrypted content based on the key information (¶7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Alain with the teachings of Tanaka, for the purpose of protecting content distribution (Tanaka: ¶15), provide content/licensing flexibility (Tanaka: ¶329) and properly remunerate the creators (Tanaka: ¶331).

Re claim 2: The combination of Alain and Tanaka teaches the license includes the license identification information (Tanaka: Fig 5, particularly elt: "Lic. ID;" Fig 8) and the group device identification information (Alain: Fig 2c.1, elements: 238, "id B," "id C" & "id D").

Re claim 4: The combination of Alain and Tanaka teaches requesting an information server to register the device group in the information server (Alain: Fig 2D; ¶108)

Re claim 5: The combination of Alain and Tanaka teaches means for requesting the information server to register the information device (Alain: Fig 2D; ¶108), and to submit the grouped device identification information and the key information to the information device (Alain: ¶75-¶76).

Re claim 9: The combination of Alain and Tanaka teaches a plurality of information devices is owned by one user (Alain: ¶175).

Re claim10: The combination of Alain and Tanaka teaches the key information, corresponds to a device node key allocated to the plurality of information devices, the

device node key being a node in a bottom layer among a plurality of node keys in a hierarchical tree structure, wherein each of the plurality of node keys is encrypted and corresponds to a different node in the hierarchical tree structure, which branches off from a top layer to the bottom layer, the encrypted content, is multiply encrypted by each of the plurality of node keys on a path in the hierarchical tree structure from the device node key to a root key, the root key being one of the plurality of node keys in the top layer of the hierarchical tree structure, and the means for reading out sequentially decrypts each of the node keys on the path from the bottom layer to the top layer in the hierarchical tree structure, using the key information as the device node key to obtain the root key, and then decrypts the encrypted content by using the obtained root key (Tanaka: Figs 12, 18A, 18B & 18C; ¶137-¶140).

Re claim 11: The combination of Alain and Tanaka teaches the encrypted content, is encrypted by a content key that is encrypted by the root key, and the means for reading out decrypts the content key by using the root key, and then decrypts the encrypted content using the content key (Alain: ¶63-¶64; Tanaka: ¶11).

Re claim 12: The combination of Alain and Tanaka teaches the encrypted content, includes at least one of text data, still image data, moving image data, or voice data (Alain: ¶58).

Re claims 20 and 23: Claim 20 and 23 are rejected under similar grounds as those provided in claim 1 *supra*.

4. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alain et al (U.S. Pat Pub 2003/0110131 A1), hereinafter referred to as Alain, in view of Tanaka et al (U.S. Pat Pub 2002/0114466 A1), hereinafter referred to as Tanaka, in further view of Oho et al (U.S. Pat Pub 2002/0184515 A1), hereinafter referred to as Oho.

Re claim 6: The combination of Alain and Tanaka teaches all the limitation of claim4 as previously stated.

However Oho teaches means for storing unique device identification information for identifying the information device from others of the plurality of information devices (§146); and means for requesting the information server to register in the information server the unique device identification information (§140; §146; §109).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Alain and Tanaka with the teachings of Oho, for the purpose of flexibly adding new devices to access secure content.

Re claim 7: The combination of Alain, Tanaka and Oho teaches means for producing the unique device identification information (Oho: §110-§111).

Re claim 8: The combination of Alain, Tanaka and Oho teaches means for requesting the information server to delete from the information server the unique device identification information (Oho: §67; §233; §235).



5. Claims 13, 14, 16-19, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oho et al (U.S. Pat Pub 2002/0184515 A1), hereinafter referred to as Oho, in view of Alain et al (U.S. Pat Pub 2003/0110131 A1), hereinafter referred to as Alain, in further view of Narin et al (U.S. Pat Pub 2004/0158731 A1), hereinafter referred to as Narin.

Re claim 13: Oho teaches an information server, comprising:

means for registering one of the plurality of information devices according to a service registration request from the one of the plurality of information devices (Fig 19A; Fig 18; ¶41; ¶178; ¶180), for associating grouped device identification information and key information with the plurality of information devices (Fig 20; ¶120-¶121; ¶176-¶177).

means for receiving a license request from the one of the plurality of information devices and for transmitting a license to the one of the plurality of information devices (¶18), the license request including license identification information associated with the encrypted content and corresponding to the license (¶123; ¶356),

However, Alain teaches providing the grouped device identification information and the key information to the one of the plurality of information devices, the grouped device identification information grouping and identifying the plurality of information devices, the key information being associated with an encrypted content (Fig 2B; Fig 2c.1; ¶13; ¶15; ¶17);

the license identifying the grouped device identification information (Fig 2c.1, elements: "Group B," "Group C;" Fig 2c.2, elements: "group ID," "user/group ID; ¶17,

lines 11-14; Fig 2D; ¶108), and being associated with the encrypted content (Fig 2c.1, particularly, elements 238 & 239).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho with the teachings of Alain, for the purpose of providing access control to a plurality of devices, as taught by Alain.

The combination of Oho and Alain does not expressly disclose the license request including the grouped device identification information.

However, Narin teaches the license request including the grouped device identification information (Abstract, lines 1-4; ¶17, lines 1-4; ¶135; ¶138).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho and Alain with the teachings of Narin, for the purpose of providing flexibility in supplying access to content to a plurality of users, e.g. a group or large organization, simultaneously.

Re claim 14: The combination of Oho, Alain and Narin teaches means for extracting device identification that identifies the one of plurality of the information devices from a device registration request from the one of the plurality of information devices, for associating the device identification information with the grouped device identification information, and for registering the device identification information according to the device registration request (Oho: ¶40; Fig 19A).

Re claim 16: The combination of Oho, Alain and Narin teaches means for extracting deletes the device identification information, which is specified by a device

registration deletion request from the one of the plurality of information devices (Oho: ¶67; ¶233; ¶235).

Re claim 17: The combination of Oho, Alain and Narin teaches means for extracting the grouped device identification information from the license request request (Oho: ¶123; ¶328; ¶356) and for determining whether to charge for transmitting the license from information server, based on whether the grouped device identification information has been registered by the information server (Oho: ¶123; ¶328; ¶356).

Re claim 18: The combination of Oho, Alain and Narin teaches the plurality of information devices is owned by one user (Alain: ¶175).

Re claim 19: Oho teaches an information processing system, comprising:  
an information server (¶2; ¶172); and  
an information device configured to receive a service from the information server through communication lines (¶7), wherein, the information server includes,  
means for registering the information device according to a service registration request from the information device (Fig 19A; Fig 18; ¶41; ¶178; ¶180), for associating grouped device identification information and key information with the information device (Fig 20; ¶120-¶121; ¶176-¶177);  
means for receiving a license request from the information device and for transmitting a license to the information device (¶18), the license request license identification information associated with the encrypted content and a corresponding to the license (¶123; ¶356);  
the information device (Abstract: lines 12-14) includes,

means for storing the encrypted content (¶¶6-¶7; Fig 68);

means for storing the license, means for storing the grouped device identification information in the key information, which are provided from the information server (Figs: 7a & 7b; ¶7; ¶20);

However, Alain teaches providing the grouped device identification information and the key information to the information device, the grouped device identification information grouping and identifying a plurality of information devices including the information device, the key information being associated with an encrypted content (Fig 2B; Fig 2c.1; ¶13; ¶15; ¶17);

the license identifying the grouped device identification information and being associated with the encrypted content (Fig 2c.1, particularly elts 238 & 239);

means for reading out the license identification information from the encrypted content, for reading out the grouped device identification information from the license corresponding to the license identification information, for reading out the key information based on the grouped device identification information, and for decrypting the encrypted content based on the key information (Fig 2c.1: ¶102-¶103.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho with the teachings of Alain, for the purpose of providing access control to a plurality of devices, as taught by Alain.

The combination of Oho and Alain does not expressly disclose the license request including the grouped device identification information.

However, Narin teaches the license request including the grouped device identification information (Abstract, lines 1-4; ¶17, lines 1-4; ¶135; ¶138).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho and Alain with the teachings of Narin, for the purpose of providing flexibility in supplying access to content to a plurality of users, e.g. a group or large organization, simultaneously.

Re claims 24 and 25: Claims 24 & 25 are rejected under similar grounds as those provided in claim 13 *supra*.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oho et al (U.S. Pat Pub 2002/0184515 A1), hereinafter referred to as Oho, Alain et al (U.S. Pat Pub 2003/0110131 A1), hereinafter referred to as Alain, Narin et al (U.S. Pat Pub 2004/0158731 A1), hereinafter referred to as Narin, in further view of O'Neil (U.S. Pat Pub 2002/0085490 A1), hereinafter referred to as O'Neil.

Re claim 15: The combination of Oho, Alain and Narin teaches all the limitations of claim 14 as previously discussed.

However, O'Neil teaches after the number of device identification information registered in one device group reaches a predetermined number, the device registration management means for extracting refuses a device registration request from an information device, after a number of information devices in the plurality of information devices reaches a predetermined number (¶6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teachings of Oho, Alain and Narin with the teachings of O'Neil, for the purpose of preventing too many devices from entering a group and degrading group communication performance.

### ***Conclusion***

**Examiner's Note:** Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the text of the passage taught by the prior art or disclosed by the examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARREN SCHWARTZ whose telephone number is (571)270-3850. The examiner can normally be reached on 7am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571)272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S./  
Examiner, Art Unit 2435

/Kimyen Vu/  
Supervisory Patent Examiner, Art Unit 2435